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# 56



# How To Make Jellies, Jams, and Preserves at Home

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# How To Make Jellies, Jams, and Preserves at Home

Jelly, jam, conserve, marmalade, preserves—any of these fruit products can add zest to meals. Most of them also provide a good way to use fruit not at its best for canning or freezing—the largest or smallest fruits and berries and those that are irregularly shaped.

Basically these products are much alike; all of them are fruit preserved by means of sugar, and usually all are jellied to some extent. Their individual characteristics depend on the kind of fruit used and the way it is prepared, the proportions of different ingredients in the mixture, and the method of cooking.

Jelly is made from fruit juice; the product is clear and firm enough to hold its shape when turned out of the container. Jam, made from crushed or ground fruit, tends to hold its shape but generally is less firm than jelly. Conserves are jams made from a mixture of fruits, usually including citrus fruit; often raisins and nuts are added. Marmalade is a tender jelly with small pieces of fruit distributed evenly throughout; a marmalade commonly contains citrus fruit. Preserves are whole fruits or large pieces of fruit in a thick sirup, often slightly jellied.

Not all fruits have the properties needed for making satisfactory jellied products, but with the commercial pectins now on the market, the homemaker need not depend on the jelling quality of the fruit for successful results.

This publication tells how to make various kinds of jellies, jams, and conserves, with and without added pectin. It also includes recipes for marmalades and preserves made with no added pectin.

## Four essential ingredients

Proper amounts of fruit, pectin, acid, and sugar are needed to make a jellied fruit product.

### Fruit

Fruit gives each product its characteristic flavor and furnishes at least part of the pectin and acid required for successful gels.

Flavorful varieties of fruits are best for jellied products because the fruit flavor is diluted by the large proportion of sugar necessary for proper consistency and good keeping quality.

## **Pectin**

Some kinds of fruit have enough natural pectin to make high-quality products. Others require added pectin, particularly when they are used for making jellies, which should be firm enough to hold their shape. All fruits have more pectin when they are underripe.

Commercial fruit pectins, which are made from apples or citrus fruits, are on the market in two forms—liquid and powdered. Either form is satisfactory when used in a recipe developed especially for that form.

These pectins may be used with any fruit. Many homemakers prefer the added-pectin method for making jellied fruit products because fully ripe fruit can be used, cooking time is shorter and is standardized so that there is no question when the product is done, and the yield from a given amount of fruit is greater.

Fruit pectins should be stored in a cool, dry place so they will keep their gel strength. They should not be held over from one year to the next.

## **Acid**

Acid is needed for flavor and for gel formation. The acid content varies in different fruits and is higher in underripe fruits.

With fruits that are low in acid, lemon juice or citric acid is commonly added in making jellied products. Also, commercial fruit pectins contain some acid.

In the recipes in this publication, lemon juice is included to supply additional acid when necessary. If you wish, use  $\frac{1}{8}$  teaspoon of crystalline citric acid for each tablespoon of lemon juice called for.

## **Sugar**

Sugar helps in gel formation, serves as a preserving agent, and contributes to the flavor of the jellied product. It also has a firming effect on fruit, a property that is useful in the making of preserves.

Beet and cane sugar can be used with equal success. Although they come from different sources, they have the same composition.

## **Equipment and containers**

### **Equipment**

A large kettle is essential. To bring mixture to a full boil without boiling over, use an 8- or 10-quart kettle with a broad flat bottom.

A jelly bag or a fruit press may be used for extracting fruit juice for jellies. The bag may be made of several thicknesses of closely woven cheesecloth, of firm unbleached muslin, or canton flannel with napped side in. Use a jelly bag or cheesecloth to strain pressed juice. A special stand or collander will hold the jelly bag.

A jelly, candy, or deep-fat thermometer is an aid in making fruit products without added pectin.

Other kitchen equipment that may be useful includes a quart measure, measuring cup and spoons, paring and utility knives, food chopper, masher, reamer, grater, bowls, wire basket, colander, long-handled spoon, ladle, clock with second hand, and household scale.

### **Containers**

Jelly glasses or canning jars may be used as containers for jellied fruit products. Be sure all jars and closures are perfect. Discard any with cracks or chips; defects prevent airtight seals.

For jellies to be sealed with paraffin, use glasses or straight-sided containers that will make an attractive mold.

For jams, preserves, conserves, and marmalades, use canning jars with lids that can be tightly sealed and processed. Paraffin tends to loosen and break the seal on these products.

Get glasses or jars ready before you start to make the jellied product. Wash containers in warm, soapy water and rinse with hot water. Sterilize jelly containers in boiling water for 10 minutes. Keep all containers hot—either in a slow oven or in hot water—until they are used. This will prevent containers from breaking when filled with hot jelly or jam.

Wash and rinse all lids and bands. Metal lids with sealing compound may need boiling or holding in boiling water for a few minutes—follow the manufacturer's directions. Use new lids; bands and jars may be reused.

If you use porcelain-lined zinc caps, have clean, new rings of the right size for jars. Wash rings in hot, soapy water. Rinse well.

## **Making and storing jellied fruit products**

Directions for making different kinds of jellied fruit products are given in this publication. The formulas selected take into

account the natural pectin and acid content of the specified fruit.

## Tips on jellied fruit products

**For freshness of flavor.** To have jellied fruit products at their best, make up only the quantity that can be used within a few months; they lose flavor in storage.

**For softer or firmer products.** If fruit with average jellying properties is used, the jellied products made according to directions in this publication should be medium firm for their type. However, because various lots of fruit differ in composition, it is not possible to develop formulas that will always give exactly the same results.

If the first batch from a particular lot of fruit is too soft or too firm, adjust the proportions of fruit or the cooking time for the next batch.

In products made with added pectin—

For a softer product, use  $\frac{1}{4}$  to  $\frac{1}{2}$  cup *more* fruit or juice.

For a firmer product, use  $\frac{1}{4}$  to  $\frac{1}{2}$  cup *less* fruit or juice.

In products made without added pectin—

For a softer product, *shorten* the cooking time.

For firmer product, *lengthen* the cooking time.

**Using canned, frozen, or dried fruits.** Any fresh fruit may be canned or frozen as fruit or juice and used in jellied products later. Both fruit and juice should be canned or frozen unsweetened; if sweetened—the amount of sugar should be noted and subtracted from the amount in the jelly or jam recipe. Fruit should be canned in its own juice or with only a small amount of water. If you plan to use canned or frozen fruit without added pectin, it is best to use part underripe fruit, especially for jelly.

Unsweetened commercially canned or frozen fruit or juice can also be used in jellied products. Concentrated frozen juices make very flavorful jellies. Commercially canned or frozen products are made from fully ripe fruit, and require added pectin if used for jelly.

Dried fruit may be cooked in water until tender and used to make jams and preserves, with or without added pectin as required.

## Filling and sealing containers

Prepare canning jars and lids or jelly glasses as directed (p. 3).

**To seal with lids.**—Use only standard home canning jars. For jars with two-piece lids: Use new lids; bands may be reused. Fill

hot jars to  $\frac{1}{8}$  inch of top with hot jelly or fruit mixture. Wipe jar rim clean, place hot metal lid on jar with sealing compound next to glass, screw metal band down firmly, and stand jar upright to cool. For jars with porcelain-lined zinc caps: Place wet rubber ring on shoulder of empty jar. Fill jar to  $\frac{1}{8}$  inch of top, screw cap down tight to complete seal, and stand jar upright to cool.

Work quickly when packing and sealing jars. To keep fruit from floating to the top, gently shake jars of jam occasionally as they cool.

**To seal with paraffin.**—Use this method only with jelly. Pour hot jelly mixture immediately into hot containers to within  $\frac{1}{2}$  inch of top. Cover with hot paraffin. Use only enough paraffin to make a layer  $\frac{1}{8}$  inch thick. A single thin layer—which can expand or contract readily—gives a better seal than one thick layer or two thin layers. Prick air bubbles in paraffin. Bubbles cause holes as paraffin hardens; they may prevent a good seal. A double boiler is best for melting paraffin and keeping it hot without reaching smoking temperature.

**To process jams, conserves, marmalades, and preserves.**—Processing of these products is recommended in warm or humid climates. Inexpensive enamelware canners may be purchased at most hardware or variety stores. However, any large metal container may be used if it—

- Is deep enough to allow for 1 or 2 inches of water above the tops of the jars, plus a little extra space for boiling.
- Has a close-fitting cover.
- Has a wire or wood rack with partitions to keep jars from touching each other or the bottom or sides of the container.

Put filled home canning jars into a water bath canner or a container filled with hot water. Add hot water if needed to bring water an inch or two over tops of jars. Bring water to a rolling boil and boil gently for 5 minutes.

Remove jars from canner after processing. Cool away from drafts before storing.

## Storing jellied fruit products

Let products stand undisturbed overnight to avoid breaking gel. Cover jelly glasses with metal or paper lids. Label with name, date, and lot number if you make more than one lot a day. Store in a cool, dry place; the shorter the storage time, the better the eating quality of the product.

Uncooked jams (p. 26) may be held up to 3 weeks in a refrigerator; for longer storage, they should be placed in a freezer.

## Jellies

Jelly is clear and bright with the natural color and flavor of the fruit from which it is made. It is tender yet firm enough to hold its shape when cut.

When making jelly, with or without added pectin, it is best to prepare small cooking lots, as indicated in the recipes that follow. Increasing the quantities given is not recommended.

### To prepare fruit

Approximate amounts of fruits needed to yield the amount of juice called for are given in each recipe. However, the exact amount will vary with juiciness of the particular lot of fruit used.

Wash all fruits in cold running water, or wash them in several changes of cold water, lifting them out of the water each time. Do not let fruit stand in water.

Prepare fruit for juice extraction as directed in the recipe; the method differs with different kinds of fruit. Juicy berries may be crushed and the juice pressed out without heating. For firm fruits, heating is needed to help start the flow of juice, and usually some water is added when the fruit is heated.

### To extract juice

Put the prepared fruit in a damp jelly bag, fruit press, or a double layer of damp cheesecloth to extract the juice. The clearest jelly comes from juice that has dripped through a jelly bag without pressing. But a greater yield of juice can be obtained by twisting the bag of fruit tightly and squeezing or pressing, or by using a fruit press. Pressed juice should be re-strained through a double thickness of damp cheesecloth or a damp jelly bag; the cloth or bag should not be squeezed.

### To make jelly

**With added pectin.** In this publication some of the recipes have been developed with powdered pectin, others with liquid pectin. Because of differences between the two forms, each should be used only in recipes worked out for that form.

The order in which the ingredients are combined depends on the form of pectin. Powdered pectin is mixed with the unheated fruit juice. Liquid pectin is added to the boiling juice and sugar mixture.

Boiling time is the same with either form of pectin; a 1-minute boiling period is recommended. Accurate timing is important. Time should not be counted until the mixture has reached a full rolling boil—one that cannot be stirred down.



For best flavor, use fully ripe fruit when making jelly with added pectin.

**Without added pectin.** Jellies made without added pectin require less sugar per cup of fruit juice than do those with added pectin, and longer boiling is necessary to bring the mixture to the proper sugar concentration. Thus the yield of jelly per cup of juice is less.

It is usually best to have part of the fruit underripe when no pectin is added, because underripe fruit has a higher pectin content. The use of one-fourth underripe and three-fourths fully ripe fruit is generally recommended to assure sufficient pectin for jelly.

## To test for pectin in fruit juice

A rough estimate of the amount of pectin in fruit juice may be obtained through use of denatured alcohol or a jelmeter.

**Alcohol test.** Add 1 tablespoon cooked, cooled fruit juice to 1 tablespoon denatured alcohol. Stir slightly to mix. Juices rich in pectin will form a solid jelly-like mass. Juices low in pectin will form small particles of jelly-like material.

*NOTE: Denatured alcohol is poisonous. Do not taste the tested juice. Wash all utensils used in this test thoroughly.*

**Jelmeter test.** A jelmeter is a graduated glass tube with an opening at each end. The rate of flow of fruit juice through this tube gives a rough estimate of the amount of pectin in the juice.

If a test indicates that the juice is low in pectin, use a recipe calling for the addition of powdered or liquid pectin.

## To test for doneness

The biggest problem in making jelly without added pectin is to know when it is done. It is particularly important to remove the mixture from the heat before it is overcooked. Although an undercooked jelly can sometimes be recooked to make a satisfactory product (see p. 32), there is little that can be done to improve an overcooked mixture. Signs of overcooking are a change in color of mixture and a taste or odor of caramelized sugar.

Three methods that may be used for testing doneness of jelly made at home are described below. Of these, the temperature test probably is the most dependable.

**Temperature test.** Before cooking the jelly, take the temperature of boiling water with a jelly, candy, or deep-fat thermometer. Cook the jelly mixture to a temperature 8° F. higher than the boiling point of water. At that point the concentration of sugar will be such that the mixture should form a satisfactory gel.

It is necessary to find out at what temperature water boils in your locality because the boiling point differs at different altitudes. And, because the boiling point at a given altitude may change with different atmospheric conditions, the temperature of boiling water should be checked shortly before the jelly is to be made.

For an accurate thermometer reading, have the thermometer in a vertical position and read it at eye level. The bulb of the thermometer must be completely covered with the jelly mixture, but must not touch the bottom of the kettle.

**Spoon or sheet test.** Dip a cool metal spoon in the boiling jelly mixture. Then raise it at least a foot above the kettle, out of the steam, and turn the spoon so the sirup runs off the side. If the sirup forms two drops that flow together and fall off the spoon as one sheet, the jelly should be done. This test has been widely used; however, it is not entirely dependable.

**Refrigerator test.** Pour a small amount of boiling jelly on a cold plate, and put it in the freezing compartment of a refrigerator for a few minutes. If the mixture gels, it should be done. During this test, the jelly mixture should be removed from the heat.

## Apple Jelly

### without added pectin

4 cups apple juice (about 3 pounds apples and 3 cups water)  
2 tablespoons strained lemon juice, if desired  
3 cups sugar

● **To prepare juice.** Select about one-fourth underripe and three-fourths fully ripe tart apples. Sort, wash, and remove stem and blossom ends; do not pare or core. Cut apples into small pieces. Add water, cover, and bring to boil on high heat. Reduce heat and simmer for 20 to 25 minutes, or until apples are soft. Extract juice (p. 6).

● **To make jelly.** Measure apple juice into a kettle. Add lemon juice and sugar and stir well. Boil over high heat to 8° F. above the boiling point of water, or

until jelly mixture sheets from a spoon.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 4 or 5 eight-ounce glasses.

## Blackberry Jelly

### with powdered pectin

3½ cups blackberry juice (about 3 quart boxes berries)  
1 package powdered pectin  
4½ cups sugar

● **To prepare juice.** Sort and wash fully ripe berries; remove any stems or caps. Crush berries and extract juice (p. 6).

● **To make jelly.** Measure juice into kettle. Add pectin and stir

well. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add sugar, continue stirring, and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 5 or 6 eight-ounce glasses.

## **Blackberry Jelly**

### **with liquid pectin**

4 cups blackberry juice (about 3 quart boxes berries)

7½ cups sugar

1 bottle liquid pectin

● **To prepare juice.** Sort and wash fully ripe berries; remove any stems or caps. Crush berries and extract juice (p. 6).

● **To make jelly.** Measure juice into a kettle. Stir in sugar. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add pectin and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 8 or 9 eight-ounce glasses.

## **Blackberry Jelly**

### **without added pectin**

8 cups blackberry juice (about 5 quart boxes and 1½ cups water)

6 cups sugar

● **To prepare juice.** Select about one-fourth underripe and three-fourths ripe berries. Sort and wash; remove any stems or caps. Crush berries, add water, cover and bring to boil on high heat. Reduce heat and simmer for 5 minutes. Extract juice (p. 6).

● **To make jelly.** Measure juice into a kettle. Add sugar and stir well. Boil over high heat to 8° F. above the boiling point of water, or until jelly mixture sheets from a spoon.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 7 or 8 eight-ounce glasses.

## **Orange Jelly**

### **made from frozen concentrated juice**

¾ cups sugar

1 cup water

3 tablespoons lemon juice

½ bottle liquid pectin

1 six-ounce can (¾ cup) frozen concentrated orange juice

Stir the sugar into the water. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down. Add lemon juice. Boil hard for 1 minute.

Remove from heat. Stir in pectin. Add thawed concentrated orange juice and mix well.

Pour jelly immediately into hot containers and seal (p. 4).

Makes 4 or 5 eight-ounce glasses.

# How to make jelly with liquid pectin

## Strawberry Jelly



Select fully ripe sound strawberries. About 3 quart boxes are needed for each batch of jelly. Sort the berries. Wash about 1 quart at a time by placing berries in a wire basket and moving the basket up and down several times in cold water. Drain the berries.

(78430-B)



Remove caps and crush the berries. Place crushed berries, a small amount at a time, in a damp jelly bag or double thickness of cheesecloth held in a colander over a bowl.

(78431-B)



Bring the edges of the cloth together and twist tightly. Press or squeeze to extract the juice. Strain the juice again through two thicknesses of damp cheesecloth without squeezing.

(78432-B)

**Measure 4 cups of juice into a large kettle. Add 7½ cups of sugar to the juice; stir to dissolve the sugar.**

**Place the kettle over high heat and, stirring constantly, bring the mixture quickly to a full rolling boil that cannot be stirred down.**

(78433-B)



**Add 1 bottle of liquid pectin. Again, bring to a full rolling boil and boil hard for 1 minute.**

**Remove from heat and skim off foam quickly. If allowed to stand, the jelly may start to "set" in the kettle.**

(78434-B)



**Pour jelly immediately into hot glasses to ½ inch of top. Cover each glass with a ⅛ inch layer of paraffin. Cool glasses on a metal rack or folded cloth, then cover with metal or paper lids, label, and store in a cool, dry place.**

(78436-B)



# How to make jelly without added pectin

## Apple Jelly

Use tart, firm apples. It takes about 3 pounds for a batch of jelly; about one-fourth of them should be underripe. Sort and wash the apples. Remove stems and blossom ends and cut apples into small pieces. Do not pare or core.

(9953-D)



Put apples into a kettle. Add 1 cup water per pound of apples. Cover, bring to boil on high heat. Reduce heat and simmer until apples are tender, about 20 to 25 minutes, depending on the firmness or ripeness of the fruit.

(78437-B)



Put cooked apples into a jelly bag and allow to drip, or press to remove juice. Strain pressed juice through two thicknesses of damp cheesecloth without squeezing.

(9954-D)



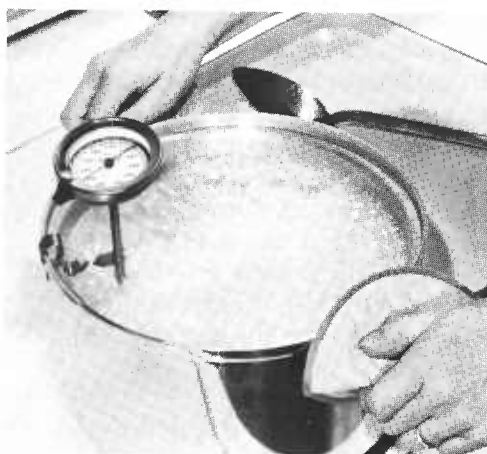
**Measure 4 cups of the apple juice into a large kettle. Add 3 cups of sugar and 2 tablespoons of lemon juice, if desired. Stir to dissolve the sugar.**

(78438-B)



**Place on high heat and boil rapidly to 8° F. above the boiling point of water, or until jelly mixture sheets from a spoon. Remove from heat. Skim off foam.**

(78439-B)



**Pour jelly immediately into hot containers.**

**Fill glasses to ½ inch of top and cover with a ¼-inch layer of paraffin.**

**Or fill canning jars (right) to ½ inch of top; wipe rims of jars. Place clean, hot metal lid on, with sealing compound next to glass. Screw metal band down tight.**

**Cool jars on a metal rack or folded cloth. Then label and store in a cool, dry place.**

(78440-B)



## Cherry Jelly

### with powdered pectin

3½ cups cherry juice (about 3 pounds or 2 quart boxes sour cherries and ½ cup water)

1 package powdered pectin

4½ cups sugar

● **To prepare juice.** Select fully ripe cherries. Sort, wash, and remove stems; do not pit. Crush cherries, add water, cover, bring to boil on high heat. Reduce heat and simmer for 10 minutes. Extract juice (p. 6).

● **To make jelly.** Measure juice into a kettle. Add pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add sugar, continue stirring, and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes about 6 eight-ounce glasses.

## Cherry Jelly

### with liquid pectin

3 cups cherry juice (about 3 pounds or 2 quart boxes sour cherries and ½ cup water)

7 cups sugar

1 bottle liquid pectin

● **To prepare juice.** Select fully ripe cherries. Sort, wash, and remove stems; do not pit. Crush cherries, add water, cover, bring to boil quickly. Reduce heat and simmer 10 minutes. Extract juice (p. 6).

● **To make jelly.** Measure juice into a kettle. Stir in sugar. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add pectin; heat again to full rolling boil. Boil hard 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes about 8 eight-ounce glasses.

## Grape Jelly

### with liquid pectin

4 cups grape juice (about 3½ pounds Concord grapes and ½ cup water)

7 cups sugar

½ bottle liquid pectin

● **To prepare juice.** Sort, wash, and remove stems from fully ripe grapes. Crush grapes, add water, cover, and bring to boil on high heat. Reduce heat and simmer for 10 minutes. Extract juice (p. 6).

To prevent formation of tartrate crystals in the jelly, let juice stand in a cool place overnight, then strain through two thicknesses of damp cheesecloth to remove crystals.

● **To make jelly.** Measure juice into a kettle. Stir in sugar. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add pectin and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly im-



mediately into hot containers and seal (p. 4).

Makes 8 or 9 eight-ounce glasses.

## **Grape Jelly**

### **made from frozen concentrated juice**

6½ cups sugar  
2½ cups water  
1 bottle liquid pectin  
3 six-ounce cans (2¼ cups) frozen concentrated grape juice

Stir sugar into water. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down. Boil hard for 1 minute.

Remove from heat. Stir in pectin. Add thawed concentrated grape juice and mix well. Pour jelly immediately into hot containers and seal (p. 4).

Makes about 10 eight-ounce glasses.

## **Grape Jelly**

### **with powdered pectin**

5 cups grape juice (about 3½ pounds Concord grapes and 1 cup water)  
1 package powdered pectin  
7 cups sugar

● **To prepare juice.** Sort, wash, and remove stems from fully ripe grapes. Crush grapes, add water, cover, and bring to boil on high heat. Reduce heat and simmer for 10 minutes. Extract juice (p. 6). To prevent formation of tartrate crystals in the jelly, let juice stand in a cool place overnight, then strain through two thicknesses of damp

cheesecloth to remove crystals that have formed.

● **To make jelly.** Measure juice into a kettle. Add pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add sugar, continue stirring, and bring again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 8 or 9 eight-ounce glasses.

## **Crabapple Jelly**

### **without added pectin**

4 cups crabapple juice (about 3 pounds crabapples and 3 cups water)  
4 cups sugar

● **To prepare juice.** Select firm, crisp crabapples, about one-fourth underripe and three-fourths fully ripe. Sort, wash, and remove stem and blossom ends; do not pare or core. Cut crabapples into small pieces. Add water, cover, and bring to boil on high heat. Reduce heat and simmer for 20 to 25 minutes, or until crabapples are soft. Extract juice (p. 6).

● **To make jelly.** Measure juice into a kettle. Add sugar and stir well. Boil over high heat to 8° F. above the boiling point of water, or until mixture sheets from a spoon.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 4 or 5 eight-ounce glasses.

## Mint Jelly

### with liquid pectin

1 cup chopped mint leaves and tender stems  
1 cup water  
½ cup cider vinegar  
¾ cups sugar  
5 drops green food coloring  
½ bottle liquid pectin

● **To prepare mint.** Wash and chop mint. Pack solidly in a cup.

● **To make jelly.** Measure mint into a kettle. Add vinegar, water, and sugar; stir well. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add food coloring and pectin; heat again to a full rolling boil. Boil hard for ½ minute.

Remove from heat. Skim. Strain through two thicknesses of damp cheesecloth. Pour jelly immediately into hot containers and seal (p. 4).

Makes 3 or 4 eight-ounce glasses.

## Mixed Fruit Jelly

### with liquid pectin

2 cups cranberry juice (about 1 pound cranberries and 2 cups water)  
2 cups quince juice (about 2 pounds quince and 4 cups water)  
1 cup apple juice (about ¾ pound apples and ¾ cup water)  
7½ cups sugar  
½ bottle liquid pectin

● **To prepare fruit.** Sort and wash fully ripe cranberries. Add

water, cover, and bring to a boil on high heat. Reduce heat and simmer for 20 minutes. Extract juice (p. 6).

Sort and wash quince. Remove stem and blossom ends; do not pare or core. Slice very thin or cut into small pieces. Add water, cover, and bring to a boil on high heat. Reduce heat and simmer for 25 minutes. Extract juice (p. 6).

Sort and wash apples. Remove stem and blossom ends; do not pare or core. Cut into small pieces. Add water, cover, and bring to a boil on high heat. Reduce heat and simmer 20 minutes. Extract juice (p. 6).

NOTE: These juices may be prepared when the fruits are in season and then frozen or canned until the jelly is made.

● **To make jelly.** Measure juices into a kettle. Stir in sugar. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add pectin and return to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 9 or 10 eight-ounce glasses.

## Plum Jelly

### with liquid pectin

4 cups plum juice (about 4½ pounds plums and ½ cup water)  
7½ cups sugar  
½ bottle liquid pectin

● **To prepare juice.** Sort and wash fully ripe plums and cut in pieces; do not peel or pit. Crush fruit, add water, cover, and bring to boil over high heat. Reduce heat and simmer for 10 minutes. Extract juice (p. 6).

● **To make jelly.** Measure juice into a kettle. Stir in sugar. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add pectin; bring again to full rolling boil. Boil hard 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 7 or 8 eight-ounce glasses.

## **Plum Jelly**

### **with powdered pectin**

5 cups plum juice (about 4½ pounds plums and 1 cup water)

1 package powdered pectin  
7 cups sugar

● **To prepare juice.** Sort and wash fully ripe plums and cut in pieces; do not peel or pit. Crush fruit, add water, cover, and bring to boil on high heat. Reduce heat and simmer for 10 minutes. Extract juice (p. 6).

● **To make jelly.** Measure juice into a kettle. Add pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add sugar, continue stirring, and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 7 or 8 eight-ounce glasses.

## **Quince Jelly**

### **without added pectin**

3¾ cups quince juice (about 3½ pounds quince and 7 cups water)

¼ cup lemon juice  
3 cups sugar

● **To prepare juice.** Select about one-fourth underripe and three-fourths fully ripe quince. Sort, wash, and remove stems and blossom ends; do not pare or core. Slice quince very thin or cut into small pieces. Add water, cover, and bring to boil on high heat. Reduce heat and simmer for 25 minutes. Extract juice (p. 6).

● **To make jelly.** Measure quince juice into a kettle. Add lemon juice and sugar and stir well. Boil over high heat to 8° F. above the boiling point of water, or until jelly mixture sheets from a spoon.

Remove from heat; skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes about 4 eight-ounce glasses.

## **Strawberry Jelly**

### **with liquid pectin**

Follow directions for blackberry jelly with liquid pectin, page 9. (See also pp. 6 and 4.)

## **Strawberry Jelly**

### **with powdered pectin**

Follow directions for blackberry jelly with powdered pectin, page 8.

## **Spiced Orange Jelly**

### **with powdered pectin**

2 cups orange juice (about 5 medium oranges)  
1/3 cup lemon juice (about 2 medium lemons)  
2/3 cup water  
1 package powdered pectin  
2 tablespoons orange peel, finely chopped  
1 teaspoon whole allspice  
1/2 teaspoon whole cloves  
4 sticks cinnamon, 2 inches long  
3 1/2 cups sugar

Mix orange juice, lemon juice, and water in a large saucepan. Stir in pectin.

Place orange peel, allspice, cloves, and cinnamon sticks loosely in a clean white cloth; tie with a string and add to fruit mixture.

Place on high heat and, stirring constantly, bring quickly to a full rolling boil that cannot be stirred down.

Add sugar, continue stirring, and heat again to a full rolling boil. Boil hard for 1 minute.

Remove from heat. Remove spice bag and skim off foam quickly. Pour jelly immediately into hot containers and seal (p. 4).

Makes 4 eight-ounce glasses.

## **Jams**

Jam is smooth and thick and has the natural color and flavor of the fruit from which it is made. It has a softer consistency than jelly.

On the following pages are directions for making jams from various fruits and combinations of fruits.

Because the products contain fruit pulp or pieces of fruit, they tend to stick to the kettle during cooking and require constant stirring to prevent scorching.

To help prevent fruit from floating in jam, remove cooked mixture from heat and stir gently at frequent intervals for 5 minutes.

### **With added pectin**

For jams, as for jellies, the method of combining ingredients varies with the form of pectin used. Powdered pectin is mixed with the unheated crushed fruit; liquid pectin is added to the cooked fruit and sugar mixture immediately after it is removed from the heat.

Cooking time is the same for all the products—1 minute at a full boil. The full-boil stage is reached when bubbles form over the entire surface of the mixture.

With added pectin, jams can be made without cooking from some fresh or frozen fruits (see recipe, p. 26).

## **Without added pectin**

Jams made without added pectin require longer cooking than those with added pectin. The most reliable way to judge doneness is to use a thermometer. Before making the product, take the temperature of boiling water. Cook the mixture to a temperature 9° F. higher than the boiling point of water. It is important to stir the mixture thoroughly just before taking the temperature, to place the thermometer vertically at the center of kettle, and to have the bulb covered with fruit mixture but not touching the bottom of the kettle. Read the thermometer at eye level.

If you have no thermometer, cook products made without added pectin until they have thickened somewhat. In judging thickness allow for the additional thickening of the mixture as it cools. The refrigerator test suggested for jelly may be used (see p. 8).

### **Blackberry Jam**

#### **with powdered pectin**

6 cups crushed blackberries (about 3 quart boxes berries)  
1 package powdered pectin  
8½ cups sugar

● **To prepare fruit.** Sort and wash fully ripe berries; remove any stems or caps. Crush berries. If they are very seedy, put part or all of them through a sieve or food mill.

● **To make jam.** Measure crushed berries into a kettle. Add pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly. Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 11 or 12 half-pint jars.

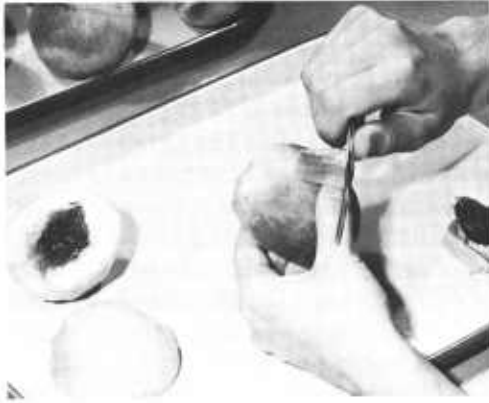
### **Blackberry Jam**

#### **with liquid pectin**

Follow directions for strawberry jam with liquid pectin, page 25. Put very seedy blackberries through a sieve or food mill.

# How to make jam with powdered pectin

## Peach Jam



**Sort and wash fully ripe peaches. Remove stems, skins, and pits.**

(78442-B)



**Crush or chop the peaches. A stainless steel potato masher is useful for this purpose.**

(78443-B)



**Measure  $3\frac{3}{4}$  cups of crushed peaches into a large kettle.**

(78444-B)

**Add one package of powdered pectin and  $\frac{1}{4}$  cup of lemon juice. Stir well to dissolve the pectin. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.**

(9955-D)



**Stir in 5 cups of sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly to prevent sticking.**

**Remove jam from heat and skim and stir alternately for 5 minutes to help prevent fruit from floating.**

(78445-B)



**Pour the jam into hot glasses to  $\frac{1}{8}$  inch of top. Process 5 minutes in boiling water bath (p. 5). Cool glasses on a metal rack or folded cloth, then cover them with metal or paper lids. After cooling, label and store in a cool, dry place.**

(9956-D)



## Cherry Jam

### with liquid pectin

4½ cups ground or finely chopped pitted cherries (about 3 pounds or 2 quart boxes sour cherries)  
7 cups sugar  
1 bottle liquid pectin

● **To prepare fruit.** Sort and wash fully ripe cherries; remove stems and pits. Grind cherries or chop fine.

● **To make jam.** Measure prepared cherries into a kettle. Add sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly.

Remove from heat and stir in the pectin. Skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes about 8 half-pint jars.

## Cherry Jam

### with powdered pectin

4 cups ground or finely chopped pitted cherries (about 3 pounds or 2 quart boxes sour cherries)  
1 package powdered pectin  
5 cups sugar

● **To prepare fruit.** Sort and wash fully ripe cherries; remove stems and pits. Grind cherries or chop fine.

● **To make jam.** Measure prepared cherries into a kettle. Add pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly. Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 6 half-pint jars.

## Mint-Pineapple Jam

### with liquid pectin

1 20-oz. can crushed pineapple  
¾ cup water  
¼ cup lemon juice  
7½ cups sugar  
1 bottle liquid pectin  
½ teaspoon mint extract  
Few drops green coloring

Place crushed pineapple in a kettle. Add water, lemon juice, and sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly. Remove from heat; add pectin, flavor extract, and coloring. Skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 9 or 10 half-pint jars.

**Variation.** Use 10 drops oil of spearmint instead of extract.

## Ginger-Peach Jam

Use either of the peach jam recipes (p. 23). Add 1 to 2 ounces of finely chopped candied ginger, as desired, to crushed peaches before adding pectin.



## Fig Jam

### with liquid pectin

4 cups crushed figs (about 3 pounds figs)  
½ cup lemon juice  
7½ cups sugar  
½ bottle liquid pectin

● **To prepare fruit.** Sort and wash fully ripe figs; remove stem ends. Crush or grind fruit.

● **To make jam.** Place crushed figs into a kettle. Add sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly.

Remove from heat. Stir in pectin. Skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes about 9 half-pint jars.

## Peach Jam

### with liquid pectin

4¼ cups crushed peaches (about 3½ pounds peaches)  
¼ cup lemon juice  
7 cups sugar  
½ bottle liquid pectin

● **To prepare fruit.** Sort and wash fully ripe peaches. Remove stems, skins, and pits. Crush peaches.

● **To make jam.** Measure crushed peaches into a kettle. Add lemon juice and sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly.

Remove from heat; stir in pectin. Skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes about 8 half-pint jars.

## Peach Jam

### with powdered pectin

3¾ cups crushed peaches (about 3 pounds peaches)  
¼ cup lemon juice  
1 package powdered pectin  
5 cups sugar

● **To prepare fruit.** Sort and wash fully ripe peaches. Remove stems, skins, and pits. Crush peaches.

● **To make jam.** Measure crushed peaches into a kettle. Add lemon juice and pectin; stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly. Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes about 6 half-pint jars.

## Pineapple Jam

### with liquid pectin

1 20-ounce can crushed pineapple  
3 tablespoons lemon juice  
3¼ cups sugar  
½ bottle liquid pectin

Combine pineapple and lemon juice in a kettle.

Add sugar and stir well.

Place on high heat and, stir-

ring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly.

Remove from heat; stir in pectin. Skim.

Let stand for 5 minutes.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 4 or 5 half-pint jars.

## **Rhubarb-Strawberry Jam**

### **with liquid pectin**

1 cup cooked red-stalked rhubarb (about 1 pound rhubarb and  $\frac{1}{4}$  cup water)

$2\frac{1}{2}$  cups crushed strawberries (about  $1\frac{1}{2}$  quart boxes)

$6\frac{1}{2}$  cups sugar

$\frac{1}{2}$  bottle liquid pectin

● **To prepare fruit.** Wash rhubarb and slice thin or chop; do not peel. Add water, cover, and simmer until rhubarb is tender (about 1 minute).

Sort and wash fully ripe strawberries; remove stems and caps. Crush berries.

● **To make jam.** Measure prepared rhubarb and strawberries into a kettle. Add sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly.

Remove from heat and stir in pectin. Skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 7 or 8 half-pint jars.

## **Plum Jam**

### **with liquid pectin**

$4\frac{1}{2}$  cups crushed plums (about  $2\frac{1}{2}$  pounds plums)

$7\frac{1}{2}$  cups sugar

$\frac{1}{2}$  bottle liquid pectin

● **To prepare fruit.** Sort fully ripe plums, wash, cut into pieces, and remove pits. If flesh clings tightly to pits, cook plums slowly in a small amount of water for a few minutes until they are softened, then remove pits. Crush fruit.

● **To make jam.** Measure crushed plums into a kettle. Add sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly.

Remove from heat and stir in pectin. Skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes about 8 half-pint jars.

## **Plum Jam**

### **with powdered pectin**

6 cups crushed plums (about  $3\frac{1}{2}$  pounds plums)

1 package powdered pectin

8 cups sugar

● **To prepare fruit.** Sort fully ripe plums, wash, cut into pieces, and remove pits. If flesh clings tightly to pits, cook plums slowly in a small amount of water for a few minutes until they are softened, then remove pits. Crush fruit.

● **To make jam.** Measure crushed

plums into a kettle. Add pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute. Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes about 9 half-pint jars.

## **Spiced Blueberry-Peach Jam**

### **without added pectin**

4 cups chopped or ground peaches (about 4 pounds peaches)

4 cups blueberries (about 1 quart fresh blueberries or 2 ten-ounce packages of unsweetened frozen blueberries)

2 tablespoons lemon juice

½ cup water

5½ cups sugar

½ teaspoon salt

1 stick cinnamon

½ teaspoon whole cloves

¼ teaspoon whole allspice

● **To prepare fruit.** Sort and wash fully ripe peaches; peel and remove pits. Chop or grind peaches.

Sort, wash, and remove any stems from fresh blueberries. Thaw frozen berries.

● **To make jam.** Measure fruits into a kettle; add lemon juice and water. Cover, bring to a boil, and simmer for 10 minutes, stirring occasionally.

Add sugar and salt; stir well. Add spices tied in cheesecloth. Boil rapidly, stirring constantly, to 9° F. above the boiling point of

water, or until the mixture thickens.

Remove from heat; take out spices. Skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 6 or 7 half-pint jars.

## **Strawberry Jam**

### **with liquid pectin**

4 cups crushed strawberries (about 2 quart boxes strawberries)

7 cups sugar

½ bottle liquid pectin

● **To prepare fruit.** Sort and wash fully ripe strawberries; remove stems and caps. Crush berries.

● **To make jam.** Measure crushed strawberries into a kettle. Add sugar and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface. Boil hard for 1 minute, stirring constantly.

Remove from heat and stir in pectin. Skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 8 or 9 half-pint jars.

## **Strawberry Jam**

### **with powdered pectin**

5½ cups crushed strawberries (about 3 quart boxes strawberries)

1 package powdered pectin

8 cups sugar

● **To prepare fruit.** Sort and wash fully ripe strawberries; remove stems and caps. Crush berries.

● **To make jam.** Measure crushed strawberries into a kettle. Add

pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly. Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 9 or 10 half-pint jars.

## Tutti-Frutti Jam

### with powdered pectin

3 cups chopped or ground pears (about 2 pounds pears)  
1 large orange  
¾ cup drained crushed pineapple  
¼ cup chopped maraschino cherries (3-ounce bottle)  
¼ cup lemon juice  
1 package powdered pectin  
5 cups sugar

● **To prepare fruit.** Sort and wash ripe pears; pare and core. Chop or grind the pears.

Peel orange, remove seeds, and chop or grind pulp.

● **To make jam.** Measure chopped pears into a kettle. Add orange, pineapple, cherries, and lemon juice. Stir in pectin. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly. Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 6 or 7 half-pint jars.

## Uncooked Berry Jam

### with powdered pectin

2 cups crushed strawberries or blackberries (about 1 quart berries)  
4 cups sugar  
1 package powdered pectin  
1 cup water

● **To prepare fruit.** Sort and wash fully ripe berries. Drain. Remove caps and stems; crush berries.

● **To make jam.** Place prepared berries in a large mixing bowl. Add sugar, mix well, and let stand for 20 minutes, stirring occasionally.

Dissolve pectin in water and boil for 1 minute. Add pectin solution to berry-and-sugar mixture; stir for 2 minutes.

Pour jam into freezer containers or canning jars, leaving ½-inch space at the top. Cover containers and let stand at room temperature for 24 hours or until jam has set.

Makes 5 or 6 half-pint jars.

● **To store.** Store uncooked jams in refrigerator or freezer. They can be held up to 3 weeks in a refrigerator or up to a year in a freezer. If kept at room temperature they will mold or ferment in a short time. Once a container is opened, jam should be stored in the refrigerator and used within a few days.

NOTE: If jam is too firm, stir to soften. If it tends to separate, stir to blend. If it is too soft, bring it to a boil. It will thicken on cooling.

## **Conserves, marmalades, preserves**

Conserves are jam-like mixtures of two or more fruits plus nuts or raisins or both. They are rich in flavor and have a thick, but not sticky or gummy, consistency.

Marmalade is a mixture of fruits, usually including citrus, suspended in a clear, translucent jelly. The fruit is cut in small pieces or slices.

Preserves contain large or whole pieces of fruit saturated by a clear sirup of medium to thick consistency. The tender fruit retains its original size, shape, flavor, and color.

On the following pages are directions for making conserves, marmalades, and preserves from various fruits and combinations of fruits.

Because the products contain fruit pulp or pieces of fruit, they tend to stick to the kettle during cooking and require constant stirring to prevent scorching.

### **With added pectin**

When powdered pectin is used in making conserves and marmalades, combine powdered pectin with unheated crushed fruit. Mix well. Bring to a full boil with bubbles over the entire surface. Add sugar and boil hard for 1 minute.

### **Without added pectin**

Conserves, marmalades, and preserves made without added pectin require longer cooking than those with added pectin. The most reliable way to judge doneness is to use a thermometer. Before making the product, take the temperature of boiling water. Cook the mixture to a temperature 9° F. higher than the boiling point of water. It is important to stir the mixture thoroughly just before taking the temperature, to place thermometer vertically at the center of kettle, to have bulb covered with fruit mixture but not touching the bottom of the kettle. Read the thermometer at eye level.

If you have no thermometer, cook products made without added pectin until they have thickened somewhat. In judging thickness allow for the additional thickening of the mixture as it cools. The refrigerator test suggested for jelly may be used (see p. 8).

## Apple Conserve

### with powdered pectin

4½ cups finely chopped red apples (about 3 pounds apples)  
½ cup water  
¼ cup lemon juice  
½ cup raisins  
1 package powdered pectin  
5½ cups sugar  
½ cup chopped nuts

● **To prepare fruit.** Select tart apples. Sort and wash apples. Remove stem and blossom ends and core; do not pare. Chop apples fine.

● **To make conserve.** Combine apples, water, lemon juice, and raisins in a kettle. Add pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add sugar, continue stirring, and heat again to a full bubbling boil. Boil hard for 1 minute, stirring constantly. Add nuts.

Remove from heat. If desired, add 3 or 4 drops of red food coloring. Skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 6 or 7 half-pint jars.

## Apple Marmalade

### without added pectin

8 cups thinly sliced apples (about 3 pounds)  
1 orange  
1½ cups water  
5 cups sugar  
2 tablespoons lemon juice

● **To prepare fruit.** Select tart apples. Wash, pare, quarter, and core the apples. Slice thin.

Quarter the orange, remove any seeds, and slice very thin.

● **To make marmalade.** Heat water and sugar until sugar is dissolved. Add the lemon juice and fruit. Boil rapidly, stirring constantly, to 9° F. above the boiling point of water, or until the mixture thickens. Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 6 or 7 half-pint jars.

## Damson Plum-Orange Conserve

### with powdered pectin

3½ cups finely chopped damson plums (about 1½ pounds plums)  
1 cup finely chopped oranges (1 or 2 oranges)  
Peel of ½ orange  
2 cups water  
½ cup seedless raisins  
1 package powdered pectin  
7 cups sugar  
½ cup chopped nuts

● **To prepare fruit.** Sort and wash plums; remove pits. Chop plums fine.

Peel and chop oranges. Shred peel of ½ orange very fine. Combine orange and peel, add the water, cover, and simmer for 20 minutes.

● **To make conserve.** Measure chopped plums into a kettle. Add orange, raisins, and pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add sugar, continue stirring, and heat again to a full bubbling

boil. Boil hard for 1 minute, stirring constantly. Stir in nuts. Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 8 or 9 half-pint jars.

## **Apricot-Orange Conserve**

### **without added pectin**

3½ cups chopped drained apricots (about 20-oz. cans of unpeeled apricots or 1 pound dried apricots)

1½ cups orange juice (3 or 4 medium-size oranges)

Peel of ½ orange, shredded very fine

2 tablespoons lemon juice

¾ cups sugar

½ cup chopped nuts

● **To prepare dried apricots.** Cook apricots uncovered in 3 cups water until tender (about 20 minutes); drain and chop.

● **To make conserve.** Combine all ingredients except nuts. Cook to 9° F. above the boiling point of water, or until thick, stirring constantly. Add nuts; stir well. Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes about 5 half-pint jars.

## **Grape Conserve**

### **without added pectin**

4½ cups grapes with skins removed (about 4 pounds Concord grapes)

1 orange

4 cups sugar

1 cup seedless raisins

½ teaspoon salt

Skins from grapes

1 cup nuts, chopped fine

● **To prepare fruit.** Sort and wash grapes; remove from stems. Slip

skins from grapes; save skins. Measure skinned grapes into a kettle and boil, stirring constantly, for about 10 minutes, or until seeds show. Press through a sieve to remove seeds.

Chop orange fine without peeling it.

● **To make conserve.** Add orange, sugar, raisins, and salt to sieved grapes. Boil rapidly, stirring constantly, until the mixture begins to thicken (about 10 minutes).

Add grape skins and boil, stirring constantly, to 9° F. above the boiling point of water (about 10 minutes). Do not overcook; the mixture will thicken more on cooling. Add nuts and stir well. Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 8 or 9 half-pint jars.

## **Citrus Marmalade**

### **without added pectin**

¾ cup grapefruit peel (½ grapefruit)

¾ cup orange peel (1 orange)

⅓ cup lemon peel (1 lemon)

1 quart cold water

Pulp of 1 grapefruit

Pulp of 4 medium-size oranges

⅓ cup lemon juice

2 cups boiling water

3 cups sugar

● **To prepare fruit.** Wash and peel fruit. Cut peel into thin strips. Add cold water and simmer in a covered pan until tender (about 30 minutes). Drain.

Remove seeds and membrane from peeled fruit. Cut fruit into small pieces.

● **To make marmalade.** Add boiling water to peel and fruit. Add sugar and boil rapidly to 9° F. above the boiling point of water (about 20 minutes), stirring frequently. Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 3 or 4 half-pint jars.

## **Cranberry Marmalade**

### **with powdered pectin**

2 oranges  
1 lemon  
3 cups water  
1 pound cranberries (about 4 cups)  
1 box powdered pectin  
7 cups sugar

● **To prepare fruit.** Peel oranges and lemon; remove half of white part of rinds. Finely chop or grind the remaining rinds. Put in large saucepan.

Add water, bring to a boil. Cover and simmer 20 minutes, stirring occasionally.

Chop peeled fruit. Sort and wash fully ripe cranberries. Add fruit to rind; cover and cook slowly 10 minutes longer.

● **To make marmalade.** Measure 6 cups of fruit into a large kettle. Add water to make 6 cups if necessary. Add pectin and stir well. Place on high heat and, stirring constantly, bring quickly to a full boil with bubbles over the entire surface.

Add sugar, continue stirring, and heat again to a full rolling boil. Boil hard for 1 minute, stirring constantly. Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 10 or 11 half-pint jars.

## **Peach-Orange Marmalade**

### **without added pectin**

5 cups finely chopped or ground peaches  
(about 4 pounds peaches)  
1 cup finely chopped or ground oranges  
(about 2 medium-size oranges)  
Peel of 1 orange, shredded very fine  
2 tablespoons lemon juice  
6 cups sugar

● **To prepare fruit.** Sort and wash fully ripe peaches. Remove stems, skins, and pits. Finely chop or grind the peaches.

Remove peel, white portion, and seeds from oranges. Finely chop or grind the pulp.

● **To make marmalade.** Measure the prepared fruit into a kettle. Add remaining ingredients and stir well. Boil rapidly, stirring constantly, to 9° F. above the boiling point of water, or until the mixture thickens. Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes 6 or 7 half-pint jars.

## **Tomato Marmalade**

### **without added pectin**

3 quarts ripe tomatoes (about 5½ pounds tomatoes)  
3 oranges  
2 lemons  
4 sticks cinnamon  
1 tablespoon whole cloves  
6 cups sugar  
1 teaspoon salt

● **To prepare fruit.** Peel tomatoes; cut in small pieces. Drain. Slice



oranges and lemons very thin; quarter the slices. Tie cinnamon and cloves in a cheesecloth bag.

● **To make marmalade.** Place tomatoes in a large kettle. Add sugar and salt; stir until dissolved. Add oranges, lemons, and spice bag. Boil rapidly, stirring constantly, until thick and clear (about 50 minutes). Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes about 9 half-pint jars.

## Strawberry Preserves

6 cups prepared strawberries (about 2 quart boxes strawberries)

4½ cups sugar

● **To prepare fruit.** Select large, firm, tart strawberries. Wash and drain berries; remove caps.

● **To make preserves.** Combine prepared fruit and sugar in alternate layers and let stand for 8 to 10 hours or overnight in the refrigerator or other cool place.

Heat the fruit mixture to boiling, stirring gently. Boil rapidly, stirring as needed to prevent sticking.

Cook to 9° F. above the boiling point of water, or until the sirup is somewhat thick (about 15 or 20 minutes). Remove from heat; skim.

Fill and seal containers (p. 4).

Process 5 minutes in boiling water bath (p. 5).

Makes about 4 half-pint jars.

## Questions and answers

High quality in jellied fruit products depends on so many complex factors that it is seldom possible to give just one answer to questions about problems in making these products. Using recipes from a reliable source—and following directions accurately—is the surest aid to success but does not guarantee it; it is impossible to assure uniform results because fruit varies widely in jellying quality.

The answers given here to questions commonly asked by homemakers who have had unsatisfactory results in making jellies and jams suggest possible reasons for lack of success.

**Q. What makes jelly cloudy?**

**A.** One or more of the following may cause cloudy jelly: Pouring jelly mixture into glasses too slowly. Allowing jelly mixture to stand before it is poured. Juice was not properly strained and so contained pulp. Jelly set too fast—usually the result of using too-green fruit.

**Q. Why do crystals form in jelly?**

- A. Crystals throughout the jelly may be caused by too much sugar in the jelly mixture, or cooking the mixture too little, too slowly, or too long. Crystals that form at the top of jelly that has been opened and allowed to stand are caused by evaporation of liquid. Crystals in grape jelly may be tartrate crystals (see recipe for grape jelly, p. 14).

**Q. What causes jelly to be too soft?**

- A. One or more of the following may be the cause: Too much juice in the mixture. Too little sugar. Mixture not acid enough. Making too big a batch at one time.

**Q. What can be done to make soft jellies firmer?**

- A. Soft jellies can sometimes be improved by recooking according to the directions given below. It is best to recook only 4 to 6 cups of jelly at one time.

**To remake with powdered pectin.** Measure the jelly to be re-cooked. For each quart of jelly measure  $\frac{1}{4}$  cup sugar,  $\frac{1}{4}$  cup water, and 4 teaspoons powdered pectin. Mix the pectin and water and bring to boiling, stirring constantly to prevent scorching. Add the jelly and sugar. Stir thoroughly. Bring to a full rolling boil over high heat, stirring constantly. Boil mixture hard for  $\frac{1}{2}$  minute. Remove jelly from the heat, skim, pour into hot containers, and seal.

**To remake with liquid pectin.** Measure the jelly to be re-cooked. For each quart of jelly measure  $\frac{3}{4}$  cup sugar, 2 tablespoons lemon juice, and 2 tablespoons liquid pectin. Bring jelly to boiling over high heat. Quickly add the sugar, lemon juice, and pectin and bring to a full rolling boil; stir constantly. Boil mixture hard for 1 minute. Remove jelly from the heat, skim, pour into hot containers, and seal.

**To remake without added pectin.** Heat the jelly to boiling and boil for a few minutes. Use one of the tests described on pages 7 and 8 to determine just how long to cook it. Remove jelly from the heat, skim, pour into hot containers, and seal.

**Q. What makes jelly sirupy?**

- A. Too little pectin, acid, or sugar. A great excess of sugar can also cause sirupy jelly.

**Q. What causes weeping jelly?**

**A.** Too much acid. Layer of paraffin too thick. Storage place was too warm or storage temperature fluctuated.

**Q. What makes jelly too stiff?**

**A.** Too much pectin (fruit was not ripe enough or too much added pectin was used). Overcooking.

**Q. What makes jelly tough?**

**A.** Mixture had to be cooked too long to reach jelling stage, a result of too little sugar.

**Q. What makes jelly gummy?**

**A.** Overcooking.

**Q. What causes fermentation of jelly?**

**A.** Too little sugar, or improper sealing.

**Q. Why does mold form on jelly or jam?**

**A.** Because an imperfect seal has made it possible for mold and air to get into the container.

**Q. What causes jelly or jam to darken at the top of the container?**

**A.** Storage in too warm a place. Or a faulty seal that allows air to leak in.

**Q. What causes fading?**

**A.** Too warm a storage place or too long storage. Red fruits such as strawberries and raspberries are especially likely to fade.

**Q. Why does fruit float in jam?**

**A.** Fruit was not fully ripe, was not thoroughly crushed or ground, was not cooked long enough, or was not properly packed in glasses or jars. To prevent floating fruit, follow directions on page 21. (If glasses are used, stir jam before packing; if canning jars are used, shake jars gently after packing.)

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